

ABSTRACT OF THE DISCLOSURE

A method of forming a pattern finer than an existing pattern in a semiconductor device using an existing light source and a hard mask, and a method of removing the hard mask which is used as a an etching mask. The method includes forming an oxide layer on a substrate; forming a polysilicon layer on the oxide layer; forming a hard mask on the polysilicon layer; depositing photoresist on the hard mask and patterning the hard mask by using the photoresist; and etching the polysilicon layer using the pattern embodied by the hard mask. By fabricating a gate oxide with a finer linewidth using a hard mask and existing equipment, the present invention can control the linewidth required in each product by using an etching process, and, therefore, has advantages such as expandability of process, extension of generality, and maximization of productivity in the production line.